CLAIMS

1. An image processing method for processing image

data to be output to an image forming apparatus that is

5   capable of making a two-way recording to form an image on a

recording medium by recording in a forward path and a return

path of a scan by an ink-jet recording head, comprising:

a halftone process that is based on an inclined line-

group keytone and maintains keytone continuity,

10   wherein the halftone process includes a dither process in

which the inclined line-group keytone appears at a stage where

the recording in the forward path is made.

2. The image processing method as claimed in claim

15   1, wherein the dither process uses a dither mask that is

formed by first patterns and second patterns, the first

patterns have a plurality of different threshold values by

combinations of dots recognizable as inclined line-group tone

patterns, and the second patterns interpolate between the

20   first patterns to obtain linear gradation values.

3. The image processing method as claimed in claim

2, wherein the dither process uses a dither mask in which

threshold values at dot positions recorded during the

25   recording in the forward path are small relative to threshold

values at dot positions recorded during the recording in the return path in a section between first and second threshold values, the first threshold value emphasizes the inclined line-group keytone pattern by a combination of specific dots,

5   and the second threshold value is higher than the first threshold value and emphasizes the inclined line-group keytone pattern by a combination of specific dots.

4.   The image processing method as claimed in claim

10   3, wherein at least 70% of the threshold values at the dot positions recorded during the recording in the forward path are smaller than the threshold values at the dot positions recorded during the recording in the return path.

15   5.   The image processing method as claimed in any of claims 1 to 4, wherein the dither process uses a dither mask that copes with a two-way interlace recording or a multi-path recording of the image forming apparatus.

20   6.   A printer driver for causing a computer to execute a halftone process according to the image processing method recited in any of claims 1 to 5, to output the image data to the image forming apparatus.

25   7.   An image processing apparatus provided with the

printer driver recited in claim 6, to carry out a halftone

process with respect to the data to be output to the image

forming apparatus.

5   8.   An image forming apparatus capable of making a

two-way recording to form an image on a recording medium by

recording in a forward path and a return path of a scan by an

ink-jet recording head, comprising:

a halftone process part configured to carry out a

10   halftone process that is based on an inclined line-group

keytone and maintains keytone continuity,

wherein the halftone process part includes a dither

process part configured to carry out a dither process in which

the inclined line-group keytone appears at a stage where the

15   recording in the forward path is made.

9.   The image forming apparatus as claimed in claim

8, wherein the dither process part uses a dither mask that is

formed by first patterns and second patterns, the first

20   patterns have a plurality of different threshold values by

combinations of dots recognizable as inclined line-group tone

patterns, and the second patterns interpolate between the

first patterns to obtain linear gradation values.

25   10.   The image forming apparatus as claimed in

claim 9, wherein the dither process part uses a dither mask in which threshold values at dot positions recorded during the recording in the forward path are small relative to threshold values at dot positions recorded during the recording in the

5   return path in a section between first and second threshold values, the first threshold value emphasizes the inclined line-group keytone pattern by a combination of specific dots, and the second threshold value is higher than the first threshold value and emphasizes the inclined line-group keytone

10   pattern by a combination of specific dots.

         11. The image forming apparatus as claimed in claim 10, wherein at least 70% of the threshold values at the dot positions recorded during the recording in the forward

15   path are smaller than the threshold values at the dot positions recorded during the recording in the return path.

         12. The image forming apparatus as claimed in any of claims 8 to 11, wherein the dither process part uses a

20   dither mask that copes with a two-way interlace recording or a multi-path recording of the image forming apparatus.

         13. An image forming system comprising:
         an image processing apparatus recited in claim 7; and

25   an image forming apparatus recited in any of claims 8 to

12.

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